

IN THE CLAIMS

Please enter the following clarifying claim amendments:

1-14. (canceled)

15. (currently amended) A method for controlling communication with a host computer connected to a first communication network and a plurality of communication devices that define a second communication network associated with a plurality of remote devices that are to be monitored and controlled by the host computer, the method comprising:

 sending a path determination message to a target communication device from a site controller through the second communication network prompting the target communication device to retransmit the path determination message to the site controller through the second communication network,

 generating a network map of ~~the all~~ down-stream communication paths from the site controller to the target communication device and ~~all~~ up-stream communication paths from the target communication device to the site controller from the unique addresses of the communication devices that retransmitted the path determination message from the site controller to the target communication device or from the target communication device to the site controller,

 based on the network map, determining one or more up-stream and down-stream communication paths associated with each of the plurality of communication devices;

 managing communication with each of the plurality of communication devices and the identification of each of the plurality of communication devices in the one or more communication paths, via a first communication protocol, based on one or more of the communication paths associated with each of the plurality of communication devices; and

 managing communication with the host computer via a second communication protocol.

16. (original) The method of claim 15, wherein each of the plurality of communication devices are wireless communication devices, the plurality of wireless communication devices being disposed throughout a geographic area such that the antenna patterns associated with the plurality of wireless communication devices overlap to create a coverage area that defines the second communication network.

17. (original) The method of claim 15, wherein the first communication network is a wide area network and the second communication protocol comprises TCP/IP.

18. (previously presented) The method of claim 15, further comprising managing communication with each of the plurality of communication devices, via a first communication protocol, based on one or more of the communication paths associated with each of the plurality of communication devices wherein the first communication protocol comprises a data packet, the data packet comprising:

- a to address;
- a from address; and
- a command number comprising a function code.

19. (previously presented) The method of claim 18, wherein the data packet further comprises:

- a data field;
- a checksum field;
- a packet number field;
- a packet length field;
- a packet maximum field; and
- a message number field.

20. (original) The method of claim 15, further comprising:

receiving a request, via the first communication network, from the host computer for information related to one of the plurality of remote devices;

providing a command message to the second communication network for delivery to the one of the plurality of remote devices based on one of the communication paths associated with the communication device corresponding to the one of the plurality of remote devices.

21. (previously presented) The method of claim 20, further comprising receiving a response message, via the second communication network, that is generated by the communication device corresponding to the one of the plurality of remote devices, the response message comprising a

first communication device identifier associated with the communication device associated with the one of the plurality of remote devices and a predetermined function code corresponding to a data signal provided by the one of the plurality of remote devices associated with the communication device that generated the response message; and

 determining, based on the first communication device identifier, the communication device that generated the first data signal.

22. (original) The method of claim 21, comprising providing the data signal to the first communication network for delivery to the host computer.

23. (previously presented) A site controller for controlling communication with a host computer connected to a first communication network and a plurality of communication devices that define a second communication network associated with a plurality of remote devices that are to be monitored and controlled by the host computer, wherein the second communication network comprises a first communication device associated with a first remote device and a second communication device associated with a second remote device, the site controller comprising:

 a means for communicating with the plurality of communication devices via the second communication network;

 a means for communicating with the host computer via the first communication network;

 a means for polling the remote devices according to a predetermined schedule by transmitting a status message to one or more of the remote device requesting the remote device to transmit a message containing current operating status of the remote device;

 a means for managing down-stream communication from the site controller to a communication device and up-stream communication from a communication device to a site controller based upon a network map comprising one or more of down-stream and up-stream communication paths between each communication device and the site controller; and

 a means for managing communication with the host computer via a communication protocol.

24. (previously presented) The site controller of claim 23, wherein each of the plurality of communication devices are wireless communication devices, the plurality of wireless communication devices being disposed throughout a geographic area such that the antenna patterns associated with the plurality of wireless communication devices overlap to create a coverage area that defines the second communication network.

25. (original) The site controller of claim 23, wherein the first communication network is a wide area network and the second communication protocol comprises TCP/IP.

26. (previously presented) The site controller of claim 23, wherein the communication protocol comprises a data packet, the data packet comprising:

- a means for identifying intended recipients;
- a means for identifying the sender;
- a means for indicating a command;
- a means for data transfer;
- a means for indicating potential error;
- a means for indicating a length of a packet;
- a means for indicating a total number of packets in a message;
- a means for identifying a message;
- a means for alerting the recipients to an incoming packet; and
- a means for indicating an end of a packet.

27. (previously presented) The site controller of claim 23, wherein the means for managing communication with each of the plurality of communication devices further comprises a means for determining the one or more communication paths for each of the communication devices by receiving initialization commands from the plurality of communication devices.

28. (new) A method for controlling communication with a host computer connected to a first communication network and a plurality of communication devices that define a second communication network associated with a plurality of remote devices that are to be monitored and controlled by the host computer, the method comprising:

sending a path determination message to each communication device from a site controller through the second communication network prompting each communication device to retransmit the path determination message to the site controller through the second communication network;

generating a map of the entire network from the unique addresses of every communication device that retransmitted each path determination message from the site controller to each communication device or from each communication device to the site controller;

based on the network map, determining one or more up-stream and down-stream communication paths between the controller and each communication device;

managing communication between the controller and each of the communication devices based upon the network map and through a first communication protocol; and

managing communication between the controller and the host computer through a second communication protocol.